



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,080	03/13/2001	Satoshi Arakawa	Q61195	9113

7590 06/25/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3202

EXAMINER

LEE, SHUN K

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 06/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/804,080

Applicant(s)

ARAKAWA ET AL.

Examiner

Shun Lee

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 22 April 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 3, 5-10, 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1, 2, 4 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on 22 April 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Group I and Species A (claims 1, 2, 4, and 11) in Paper No. 8 is acknowledged.
2. Claims 3 and 5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.
3. Claims 6-10, 12, and 13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.

### *Drawings*

4. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 22 April 2003 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

### *Specification*

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Art Unit: 2878

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 2, 4, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma (US SIR H1201) in view of Hosoi *et al.* (US 4,880,987) and Verbeke *et al.* (US 5,519,229).

In regard to claim 1, Sakuma discloses (Fig. 3) a radiation imaging panel (3, 5, or 7) having a rectangular shape, wherein the shape of the radiation imaging panel is asymmetric with respect to a center axis of the radiation imaging panel, which center axis extends in an antero-posterior direction of the radiation imaging panel.

The radiation imaging panel (3, 5, or 7) of Sakuma lacks that it is a radiation image storage panel comprising a stimuable phosphor layer overlaid on the front

Art Unit: 2878

surface side of a transparent substrate. However, radiation image storage panels are well known in the art. For example, Hosoi *et al.* teach (Fig. 5; column 6, lines 14-17) a radiation image storage panel (1) comprises a stimulable phosphor layer (1B) overlaid on a front surface side of a transparent substrate (1A). As another example, Verbeke *et al.* teach (in the description of the prior art from line 15 in column 1 to line 13 in column 2) it is known in the radiography art that a radiation image storage panel offers the advantages of re-usability and better image resolution at lower dosages for a patient and that typically the radiation image storage panel is used within conventional X-ray photography cassettes.

Hosoi *et al.* also teach (column 5, lines 3-14) that the radiation image storage panel (1) is positioned so that radiation is incident from the side opposite the transparent substrate (1A). Sakuma also discloses (Fig. 3) that when a shaped radiation imaging panel (3, 5, or 7) is used within a correspondingly shaped X-ray photography cassette (4, 6, or 8, respectively), the front side of the radiation imaging panel (3, 5, or 7) can be positioned properly (column 1, lines 23-33) within the X-ray photography cassette (4, 6, or 8, respectively).

Therefore it would have been obvious to one having ordinary skill in the art to provide a known radiation image storage panel as the radiation imaging panel (3, 5, or 7) within the X-ray photography cassette (4, 6, or 8, respectively) of Sakuma thus properly positioning the radiation image storage panel within the X-ray photography cassette, in order to obtain better image resolution at lower patient dosages by using a radiation image storage panel instead of the radiation imaging panel (3, 5, or 7).

Art Unit: 2878

In regard to claim **2** which is dependent on claim 1, Sakuma also discloses (Fig. 3) that a shape (I) of one corner area, which is among four corner areas of the radiation imaging panel (3, 5, 7), is different from shapes of the other three corner areas.

In regard to claim **4** which is dependent on claim 1, Sakuma also discloses (Fig. 3) that one of a cutaway region, a projecting region, and a hole is formed only at one corner area, which is among four corner areas of the radiation imaging panel (3, 5, 7), or in the vicinity of the one corner area.

In regard to claim **11** which is dependent on claim 1, Sakuma also discloses (Fig. 3) a cassette (4, 6, or 8), comprising an accommodating section for accommodating a radiation imaging panel (3, 5, 7) as defined in claim 1, wherein the accommodating section has a shape (I') such that, due to the asymmetric shape of the radiation imaging panel (3, 5, 7), the radiation imaging panel (3, 5, 7) is prevented from being accommodated in the accommodating section with a front surface and a back surface of the radiation imaging panel (3, 5, 7) being reversed.

### ***Response to Arguments***

9. Applicant's arguments filed 22 April 2003 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Art Unit: 2878

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teaching, suggestion, or motivation to do so is found in the references themselves.

As pointed out in the grounds of rejection, the radiation imaging panels (3, 5, or 7) of Sakuma are not radiation image storage panels. However, Verbeke *et al.* teach (in the description of the prior art from line 15 in column 1 to line 13 in column 2) it is known in the radiography art that a radiation image storage panel offers the advantages of re-usability and better image resolution at lower dosages for a patient and that typically the radiation image storage panel is used within conventional X-ray photography cassettes. Thus one of one having ordinary skill in the art would use a known radiation image storage panel (as exemplified by 1 in Fig 3 of Hosoi *et al.*) within a conventional X-ray photography cassette (e.g., cassette 4, 6, or 8, in Fig. 3 of Sakuma) in order to obtain re-usability and better image resolution at lower dosages for a patient.

Further, Hosoi *et al.* teach (column 5, lines 3-14) that the radiation image storage panel (1) is position so that radiation is incident from the side opposite the transparent substrate (1A). Sakuma discloses (Fig. 3) that when a shaped radiation imaging panel (3, 5, or 7) is used within a correspondingly shaped X-ray photography cassette (4, 6, or

Art Unit: 2878

8, respectively), the front side of the radiation imaging panel (3, 5, or 7) can be positioned properly (column 1, lines 23-33) within the X-ray photography cassette (4, 6, or 8, respectively). Therefore it would have been obvious to one having ordinary skill in the art to provide a known radiation image storage panel as the radiation imaging panel (3, 5, or 7) within the X-ray photography cassette (4, 6, or 8, respectively) of Sakuma thus properly positioning the radiation image storage panel within the X-ray photography cassette, in order to obtain better image resolution at lower patient dosages by using a radiation image storage panel instead of the radiation imaging panel (3, 5, or 7).

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shun Lee whose telephone number is (703) 308-4860. The examiner can normally be reached on Tuesday-Thursday.



Art Unit: 2878

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (703) 308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
**DAVID PORTA**  
**SUPERVISORY PATENT EXAMINER**  
**TELEPHONIC CENTER 2800**

SL  
June 16, 2003